



PLANNING OF GESAMP ACTIVITIES:

SEA-BASED SOURCES OF MARINE LITTER

Report of the Chair of Working Group 43

1 Working Group 43 (WG 43) was established, in principle, during the 45th session of GESAMP which was held in September 2018. The group's terms of reference were formally approved in April 2019. The overall objective of WG 43 is to build a broader understanding of sea-based sources of marine litter, in particular from the shipping and fishing sectors, including the relative contribution of different sources, analysis of plastic use and management within both industries and the range and extent of impacts from sea-based sources of marine litter. The Working Group will build a more comprehensive understanding of types of sea-based sources of marine litter, in order to guide interventions on these sources based on identified priorities and expertise of FAO, IMO and UN Environment.

2 WG 43 is co-led by FAO (Technical Secretary for the WG: Mr. Jonathan Lansley) and IMO (Technical Secretary for the WG: Mr. Fredrik Haag) and co-sponsored by UNEP (contact: Ms. Joana Akrofi). Dr. Kirsten Gilardi (University of California, Davis/California Lost Fishing Gear Recovery Project) serves as WG 43 Chair. See annex 2 for current WG 43 membership.

3 Upon launch in 2019, WG 43 reported at GESAMP 46 on its progress to that point: identification of the chair for WG 43, administrative coordination and leadership, and establishment of the WG 43 membership; and establishment of a preliminary work plan, based on the approved Terms of Reference (TOR, see annex 1). A first meeting of WG 43 was held by teleconference on 27 June 2019. WG members were introduced, the TOR were reviewed, and a work plan was discussed. It was agreed that the WG's priority focus would be on TOR 1: Identification of sources of marine litter from sea-based sources. WG 43 members worked in small teams of 2-3 individuals each to work on TOR 1 until a first workshop of the working group was held at FAO headquarters in Rome, Italy, from 28 to 30 October 2019. At the October 2019 workshop at FAO headquarters in Rome, working group members presented results of work to date on research for TOR 1, and planned an approach to TOR 2 and TOR 3. The working group outlined its first interim report, agreed on a timetable for work, and discussed other TORs. Importantly, the WG agreed to propose to GESAMP that the language for TOR 7 be changed (see below). The working group submitted a draft of its first interim report to GESAMP for peer-review on January 1, 2020, and upon incorporation of edits and suggestions, submitted its final first interim report to GESAMP on January 26, 2020. Thereafter, with the approval of WG 43 membership, brief but important edits were made to the first interim report, which was considered final as revised on January 29, 2020. The WG Chair assisted the IMO Technical Secretariat to prepare a progress report for the 75th session of the IMO Marine Environment (MEPC) Protection Committee meeting, which was planned for April 2020 but later postponed due to COVID-19. The report is, however, available to IMO delegations as documents MEPC 75/8/5 and MEPC 75/INF.23.

4. After submittal of its first interim report, WG 43 embarked upon additional work to address its TORs. The WG met by teleconference on 13 February 2020 and submitted a draft second interim report to GESAMP for peer review on 1 May 2020. Upon incorporation of edits and suggestions, the WG submitted its final draft of the second interim report to GESAMP on 4 June

2020. This report was presented as a Session Background Document to the 34th session of the Committee of Fisheries (COFI34), which was postponed from July 2020 to 1 to 5 February 2021 due to the COVID pandemic. The document was accepted by the COFI Secretariat, and was posted on the publicly accessible website <http://www.fao.org/about/meetings/cofi/documents-cofi34/en/>. The working group met by teleconference on 18 May 2020 to plan work for the remainder of the calendar year, with intent to submit a final technical report to GESAMP for the peer review process by 1 December 2020. The working group acknowledged that an in-person meeting was unlikely due to the COVID-19 pandemic.

5. WG 43 members proceed to compile a final technical report, meeting twice by conference call (30 October 2020 and 22 February 2021) to discuss progress and make collective decisions on content. A draft final report was submitted to GESAMP for peer-review on 4 December 2021. GESAMP member input and edits were incorporated into a revised draft final technical report distributed for external review 3 March 2021. Upon receipt of external reviews, WG 43 submitted a final technical report to GESAMP and the sponsoring agencies on 15 May 2021. The report was then copy-edited and formatted for final publication and posted to the GESAMP website on 21 October 2021 as R&S 108.

6 A webinar to present WG 43 findings to the sponsoring agencies was held 23 September 2021. Sponsoring agencies welcomed attendees, the GESAMP Chair briefly introduced GESAMP, and the WG 43 Chair then presented the main conclusions of the report.

7 In addition to technical report research and writing, the WG 43 Chair has presented WG findings at several conferences. The chair was invited by the Institute of Marine Engineering, Science and Technology (IMarEST) to participate in a special panel of the World Aquaculture Society virtual meeting held 15 December 2020 to provide an overview of preliminary findings of WG 43 on aquaculture as a source of marine plastics. The WG chair was also invited by FAO to serve as a presenter at the virtual Abidjan Convention in a session on sea-based sources of marine debris held 13 April 2021, where she presented a summary of preliminary findings of WG 43. The Chair presented (virtually) on WG 43 findings via pre-recorded presentations at the Lighthouse Lofoten Conference 22, held 5-6 April 2022 and hosted by the Norwegian Centre Against Marine Litter, and at the 2nd International Conference of the African Marine Waste Network, held 23-27 May, 2022 in South Africa.

8 The IMO and FAO as WG 43 sponsoring agencies have now proposed new Terms of Reference (TOR) for WG 43; virtual meetings with the Chair to collectively discuss proposed new TORs were held on 26 April and 7 July 2022, and a final draft set of new TORs is included as annex 2 of this report. In addition to news TORs, the WG 43 chair proposed to the Sponsoring Agencies that changes in WG 43 membership would be required in order to address the new TORs. The WG 43 chair will convene an informal gathering of a subset of WG 43 members in conjunction with the 7th International Marine Debris Conference in Busan, South Korea being held 5 – 9 September, 2022 to discuss a preliminary work plan and needs for WG membership.

Action requested of GESAMP

9 GESAMP is invited to consider the information provided and to take action as appropriate, and in particular:

- .1 Review and approve the new Terms of Reference for WG 43 (see annex 2).
- .2 Task the WG 43 Chair with reconfiguring WG 43 member composition to best address new Terms of Reference once approved.

ANNEX 1

WG 43 members (July 2022)

Name	Affiliation	Country/ Region	Expertise
Kirsten Gilardi	University of California, Davis	United States	Marine pollution, marine debris, ALDFG and ALDFG removal, wildlife health
Pingguo He	School for Marine Science and Technology, University of Massachusetts Dartmouth	United States	Fishing gear technology, ecosystem impact of fishing
Kyle Antonelis	Natural Resource Consultants, Inc. (Seattle, Washington)	United States	Marine debris, ALDFG and ALDFG removal; gear design
Lumin Wang	East China Sea Fisheries Research Institute, Chinese Academy of Fishery Sciences	China	Fishing gear materials testing, gear marking
Saly N Thomas	Central Institute of Fisheries Technology	India	Fishing gear materials, ALDFG, ecosystem impact of fishing
Kelsey Richardson	CSIRO	Australia	ALDFG and ghost fishing
Emily Grilly	CCAMLR	Australia	Marine debris and fisheries conservation, RFMO scientific work
Peter Van Den Dries	Independent	Belgium	MARPOL Annex V, Port Reception Facilities
David Santillo	University of Exeter	United Kingdom	LC/LP, marine litter, marine pollution
Raffaella Piermarini	ISPRA	Italy	LC/LP
Olof Linden	WMU	Sweden	Shipping/oceans, marine pollution, Co-chair ICEAS WG on Shipping Impacts in the Marine Environment
Francois Galgani	IFREMER	France	Link to WG 40

ANNEX 2

New Terms of Reference for WG 43

The Working Group will have two concurrent work-streams:

Work-stream 1 will support information requests of the Scientific Groups of the London Convention/Protocol (LC/LP) Parties that will help identify priorities for addressing LC/LP waste streams, including ship coatings and abandoned vessels, as sources of plastic in the ocean.

Work-stream 2 will support information requests of FAO to further understand abandoned, lost and otherwise discarded fishing gear (ALDFG) as a source of ocean plastic, with a particular focus on methodologies for remediation, monitoring and reporting.

Work-stream 1 – LC/LP waste streams

- TOR1. Review methodologies and technologies to measure and reduce the presence, type, origin and quantity of plastic litter and microplastics in LC/LP waste streams.
- TOR 2. Further elucidate the amount and types of microplastics in anti-fouling paint and hull coatings, and the major geographic locations where these materials are applied and removed from ships.
- TOR 3. Conduct a global review on the scrapping and abandonment of fibre-reinforced plastic/polymer vessels, including their types, numbers, and spatial and temporal distribution.

Work-stream 2 – ALDFG

- TOR 4. Analyse trade-offs between economic costs of ALDFG recovery and benefits derived from such recovery efforts, including drifting Fish Aggregating Devices (dFADs).
 - TOR 5. Conduct a global assessment of reporting obligations and systems for ALDFG in Regional Fishery Management Organizations (RFMOs) and assess how these reporting obligations are monitored for implementation and/or compliance by RFMOs; include an overview of any ALDFG reporting recommendations endorsed by Regional Fisheries Advisory Bodies.
 - TOR 6. Identify elements that should be included in a monitoring programme for ALDFG, including an update on availability of remote, or vessel based, sensing technologies/tools for monitoring ALDFG.
 - TOR 7. Identify and analyse potential causal links between Illegal Unreported and Unregulated (IUU) fishing and ALDFG.
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